

WHAT IS CLAIMED IS:

1. A stable liquid calibrator or control for use in a ligand binding assay for
5 measuring the level of a natriuretic peptide in a test sample, wherein said calibrator or
control has a pH of from about 4.0 to about 6.5.

2. The calibrator or control of claim 1, wherein said calibrator or control has
a pH of from about 5.0 to about 6.0.

10 3. The calibrator or control of claim 1, wherein said calibrator or control
comprises at least one human synthetic natriuretic peptide.

15 4. The calibrator or control of claim 3, wherein said human synthetic
natriuretic peptide is human synthetic atrial natriuretic peptide, human synthetic B-type
natriuretic peptide, human synthetic C-type natriuretic peptide or human synthetic
Dendroaspis natriuretic peptide.

20 5. The calibrator or control of claim 1, wherein said calibrator or control
comprises at least one buffer, at least one acid, at least one base, or combinations thereof.

6. The calibrator or control of claim 5, wherein said buffer is an acetate
buffer, a citrate buffer, a phosphate buffer or combinations thereof.

25 7. The calibrator or control of claim 5, wherein said acid is acetic acid, citric
acid, diethylenetriaminepentaacetic acid, hydrochloric acid or combinations thereof.

8. The calibrator or control of claim 5, wherein the base is sodium hydroxide.

9. The calibrator or control of claim 1, wherein said calibrator or control comprises at least one diluent.

10. The calibrator or control of claim 9, wherein said diluent comprises at least one natriuretic stabilizing compound and at least one biocide.

11. The calibrator or control of claim 10, wherein said natriuretic stabilizing compound is a protein or a polymer.

12. The calibrator or control of claim 11, wherein the protein is bovine serum albumin, bovine gamma globulin, or a non-fat dry milk.

13. The calibrator or control of claim 11, wherein the polymer is polyethylene glycol, dextran, dextran sulfate or polyvinyl pyrrolidone.

14. The calibrator or control of claim 9, wherein the diluent further comprises at least one buffer, at least one acid, at least one base, or combinations thereof.

15. The calibrator or control of claim 14, wherein said buffer is an acetate buffer, a citrate buffer, a phosphate buffer or combinations thereof.

16. The calibrator or control of claim 14, wherein said acid is acetic acid, citric acid, diethylenetriaminepentaacetic acid, hydrochloric acid or combinations thereof.

17. The calibrator or control of claim 14, wherein the base is sodium hydroxide.

18. The calibrator or control of claim 1, wherein said calibrator or control can be stored at a temperature of from about 2 to about 8°C.

19. The calibrator or control of claim 1, wherein said calibrator or control can be used in an assay at ambient temperature or at a temperature of from about 30 to about 40°C.

5 20. A stable liquid calibrator or control for use in a ligand binding assay for measuring the level of a natriuretic peptide in a test sample, wherein said calibrator or control comprises:

at least one diluent; and

at least one human synthetic natriuretic peptide,

10 wherein said calibrator or control has a pH of from about 4.0 to about 6.5.

21. The calibrator or control of claim 20, wherein said calibrator or control has a pH of from about 5.0 to about 6.0.

15 22. The calibrator or control of claim 20, wherein the human synthetic natriuretic peptide is human synthetic atrial natriuretic peptide, human synthetic B-type natriuretic peptide, human synthetic C-type natriuretic peptide or human synthetic *Dendroaspis* natriuretic peptide.

20 23. The calibrator or control of claim 20, wherein said calibrator or control further comprises at least one buffer, at least one acid, at least one base, or combinations thereof.

24. The calibrator or control of claim 23, wherein said buffer is an acetate
25 buffer, a citrate buffer, a phosphate buffer or combinations thereof.

25. The calibrator or control of claim 23, wherein said acid is acetic acid, citric acid, diethylenetriaminepentaacetic acid, hydrochloric acid or combinations thereof.

30 26. The calibrator or control of claim 23, wherein the base is sodium hydroxide.

27. The calibrator or control of claim 20, wherein said diluent comprises at least one natriuretic stabilizing compound and at least one biocide.

5 28. The calibrator or control of claim 27, wherein said natriuretic stabilizing compound is a protein or a polymer.

29. The calibrator or control of claim 28, wherein the protein is bovine serum albumin, a bovine gamma globulin, or a non-fat dry milk.

10 30. The calibrator or control of claim 28, wherein the polymer is polyethylene glycol, dextran, dextran sulfate or polyvinyl pyrrolidone.

31. The calibrator or control of claim 27, wherein the diluent further
15 comprises at least one buffer, at least one acid, at least one base, or combinations thereof.

32. The calibrator or control of claim 31, wherein said buffer is an acetate buffer, a citrate buffer, a phosphate buffer or combinations thereof.

20 33. The calibrator or control of claim 31, wherein said acid is acetic acid, citric acid, diethylenetriaminepentaacetic acid, hydrochloric acid or combinations thereof.

34. The calibrator or control of claim 31, wherein the base is sodium hydroxide.

25 35. The calibrator or control of claim 20, wherein said calibrator or control can be stored at a temperature of from about 2 to about 8°C.

30 36. The calibrator or control of claim 20, wherein said calibrator or control can be used in an assay at ambient temperature or at a temperature of from about 30 to about 40°C.

37. A method of making a stable liquid calibrator or control for use in a ligand binding assay for measuring the level of a natriuretic peptide in a test sample, wherein the method comprises the steps of:

- a. mixing at least one diluent with at least one human synthetic natriuretic peptide to form a liquid calibrator or control;
- b. measuring the pH of the liquid calibrator or control; and
- c. depending upon the pH of the liquid calibrator or control measured in step b), adjusting the pH of the liquid calibrator or control to a pH of from about 4.0 to about 6.5.

38. The method of claim 37, wherein the pH of the liquid calibrator or control is adjusted to a pH of from about 5.0 to about 6.0.

39. The method of claim 37, wherein the human synthetic natriuretic peptide is human synthetic atrial natriuretic peptide, human synthetic B-type natriuretic peptide, human synthetic C-type natriuretic peptide or human synthetic *Dendroaspis* natriuretic peptide.

40. The method of claim 37, wherein the pH of the liquid calibrator or control is adjusted with at least one buffer, at least one acid, at least one base, or combinations thereof.

41. The method of claim 40, wherein said buffer is an acetate buffer, a citrate buffer, a phosphate buffer or combinations thereof.

42. The method of claim 40, wherein said acid is acetic acid, citric acid, diethylenetriaminepentaacetic acid, hydrochloric acid or combinations thereof.

43. The method of claim 40, wherein the base is sodium hydroxide.

44. The method of claim 37, wherein said diluent comprises at least one natriuretic stabilizing compound and at least one biocide.

5 45. The method of claim 44, wherein said natriuretic stabilizing compound is a protein or a polymer.

46. The method of claim 45, wherein the protein is bovine serum albumin, bovine gamma globulin, or a non-fat dry milk.

10 47. The method of claim 45, wherein the polymer is polyethylene glycol, dextran, dextran sulfate or polyvinyl pyrrolidone.

48. The method of claim 44, wherein the diluent further comprises at least one buffer, at least one acid, at least one base, or combinations thereof.

15

49. The method of claim 48, wherein said buffer is an acetate buffer, a citrate buffer, a phosphate buffer or combinations thereof.

20 50. The method of claim 48, wherein said acid is acetic acid, citric acid, diethylenetriaminepentaacetic acid, hydrochloric acid or combinations thereof.

51. The method of claim 48, wherein said base is sodium hydroxide.

25